

## Concept Review

### Section: Substances Are Made of Atoms

In the blank at the left of each word or phrase, write the letter of the expression on the right that is most closely related.

- |                                      |                                                                                                                                                                                                  |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _____ 1. atomic theory               | <b>a.</b> This states that a chemical compound always contains the same elements in exactly the same proportions by weight or mass.                                                              |
| _____ 2. law of definite proportions | <b>b.</b> This states that atoms are the building blocks of all matter.                                                                                                                          |
| _____ 3. law of conservation of mass | <b>c.</b> This states that when two elements combine to form two or more compounds, the mass of one element that combines with a given mass of the other is in the ratio of small whole numbers. |
| _____ 4. law of multiple proportions | <b>d.</b> This states that mass cannot be created or destroyed during ordinary chemical and physical changes.                                                                                    |

Answer the following in the space provided.

5. State the five principles in Dalton's atomic theory.

- a. \_\_\_\_\_  
\_\_\_\_\_
- b. \_\_\_\_\_  
\_\_\_\_\_
- c. \_\_\_\_\_  
\_\_\_\_\_
- d. \_\_\_\_\_  
\_\_\_\_\_
- e. \_\_\_\_\_  
\_\_\_\_\_